

## Improving assessments of West Coast groundfish

### Problem Statement

The once \$100 million-a-year West Coast groundfish fishery cannot be sustained due to excessive, historical catch levels and currently poor stock productivity. Stock assessments are needed to determine sustainable harvest levels in order to provide economic viability to fishing and coastal communities and prevent overfishing.

### Critical Factors

- The Secretary of Commerce has declared a groundfish emergency for 2000.
- The abundance of several important groundfish species has declined alarmingly and the status of many other species is unknown.
- The Pacific Fishery Management Council sets stringent harvest quotas for groundfish based on stock assessments prepared by the NMFS.
- The Northwest Fisheries Science Center (NWFSC) analyzes data from trawl surveys, fishery catch, and life-history studies to calibrate complex stock assessment models of groundfish population dynamics.
- The NWFSC is the only NMFS Center that does not have a dedicated Fisheries Research Vessel (FRV).
- The federal government collaborates with states, industry and universities to collect information needed to assess the status of groundfish stocks.

### Status of Research

Since 1997, NWFSC scientists have coordinated stock assessments for sablefish, Dover sole, thornyheads, and several rockfish species and are working to provide better data for future assessments and improve the scientific assumptions on which those assessments are based. In addition, NWFSC scientists have coordinated the development of a comprehensive NMFS research plan that will provide a framework for Pacific groundfish research for the next three to five years. They have also applied new statistical methods to address uncertainty in fishery logbook data. In collaboration with a University of Washington scientist and trawl experts from the Alaska Fisheries Science Center, NWFSC researchers

have developed ways of calibrating trawl vessels, gear, trawl net operations, and crew training for trawl surveys. In cooperation with Oregon State University, the Center has explored ways to improve communication and increase cooperation between government, academic scientists, and private industry. The NWFSC has also funded the Oregon Department of Fish and Wildlife to create a cooperative program in which staff are trained to age groundfish.



### Future Considerations

As concerns grow about the health and abundance of West Coast groundfish—and pressures intensify to allocate the total catch allowable among commercial, recreational and tribal interest groups—stock assessments must become more accurate. Recovering from the

current fisheries failure and preventing future failures, while minimizing the impact on coastal fishing communities, will require precise and comprehensive information on a sustained basis. NWFSC scientists will continue to work with government and university scientists and fishing industry leaders to produce more reliable assessment data.

### Key Players

#### Fishery Resource Analysis & Monitoring (FRAM) Division, NWFSC

Alaska Fisheries Science Center, NMFS  
Southwest Fisheries Science Center, NMFS  
Oregon Department of Fish & Wildlife  
Washington Department of Fish & Wildlife  
Oregon State University  
Midwater Trawlers Cooperative

California Department of Fish and Game  
Pacific Fishery Management Council  
Pacific States Marine Fisheries Commission  
Oregon Trawl Commission  
Coast Dragers Commission  
Fishermen's Marketing Association  
University of Washington

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